

ST



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/663,155	09/15/2003	Phillip Dan Cook	ISIS-5246	2151
32650	7590	03/30/2006	EXAMINER KHARE, DEVESH	
WOODCOCK WASHBURN LLP ONE LIBERTY PLACE - 46TH FLOOR PHILADELPHIA, PA 19103			ART UNIT 1623	PAPER NUMBER
DATE MAILED: 03/30/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/663,155

Applicant(s)

COOK ET AL.

Examiner

Devesh Khare

Art Unit

1623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-17, 19, 20 and 22-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-17, 19, 20 and 22-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>08/17/05; 11/07/05</u> . | 6) <input type="checkbox"/> Other: _____ |

Applicant's amendments and remarks filed on 11/07//2005 are acknowledged. Claims 18 and 21 have been. Claims 15,16,17,19 and 20 have been amended. New claims 22-25 have been added.

The rejection of claims 15-17 under 102(b) as being anticipated by Miller et al., of the Office Action mailed on 05/06/2005, has been overcome through applicants' amendments. The rejection of claims 19 and 20 under 102(b) as being anticipated by Sproat et al., of the Office Action mailed on 05/06/2005, has been withdrawn in view of applicants' remarks stating that the Sproat reference has a publication date of Feb. 25,1991 and the parent application (S/N: 07/967,267) to the present one, accorded a priority date of Aug. 13,1990.

Claims 15-17, 19,20 and 22-25 are currently pending in this application.

During the course of reconsideration of the application, a prior art reference not previously disclosed by the applicants or the examiner came to light (see rejection below).

Specification

1. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: Claims 15,19 and 22 contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Either one of T₃ and T₅ substituents are either a hydroxyl blocking group, phosphate or an activated phosphate group and the other of T₃ and T₅

Art Unit: 1623

is a nucleotide or both T₃ and T₅ are nucleotides in claims 15, 19 and 22 do not have adequate support in the specification.

Obviousness-type Double Patenting Rejection

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 15-17, 19,20 and 22-25 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 11-21 of U.S. Patent No. 5,514,786 ('786) and applicant's other U.S. Patents of same scope as following:

Claims 1-20 of 5,602,240

Claims 1-29 of 5,610,289

Claims 1-16 of 5,489,677

Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims in each of the application and the '786 patent are

Art Unit: 1623

directed to substantially the same subject matter, i.e., in the instant claims, the invention is claimed in terms of purine 2'-O-alkyloligonucleotide represented by the general formula (I) of claims 15, 19 and 22 wherein the "X" substituent is alkyl, alkenyl or alkynyl of the carbon chain length between C1-C20, while in the '786 patent it is claimed in terms of 2'-O-alkyloligonucleotide wherein the "X" substituent is alkyl, alkenyl or alkynyl and base moiety is a heterocyclic base. The said base moiety is an adenine or guanine (col.20, lines 55-60). It would have been obvious to one having ordinary skill in this art, at the time the claimed invention was made to have synthesized 2'-O-alkyloligonucleotide of the '786 patent which have the same use and effect. One having ordinary skill in the art would have been motivated, to have synthesized 2'-O-alkyloligonucleotide of the '786, which have the same use and affect.

The examiner notes the instant claims; the '786 patent and said U.S. Patents of applicants do indeed substantially overlap therefore this obviousness-type double patenting rejection is necessary to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees.

Therefore the claims are co-extensive.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Art Unit: 1623

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 22,24 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Miller et al (see Office Action dated 05/06/2005).

The applicants' claims are directed toward purine 2'-O-alkyloligonucleotide wherein purine moiety is guanine and the "X" substituent is C₁-C₂₀ alkyl.

Miller et al. anticipates the claims as it teaches guanosine 2'-O-methyloligonucleotide (page 1988, 2nd col., middle para.).

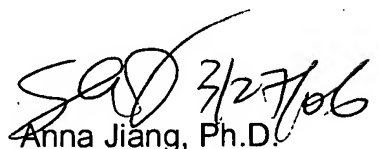
Any inquiry concerning this communication or earlier communications from the

Examiner should be directed to Devesh Khare whose telephone number is (571)272-0653. The examiner can normally be reached on Monday to Friday from 8:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anna Jiang, Supervisory Patent Examiner, Art Unit 1623 can be reached at (571)272-0627. The official fax phone numbers for the organization where this application or proceeding is assigned is (703) 308-4556 or 308-4242.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1235.

Devesh Khare, Ph.D.,J.D.
Art Unit 1623
March 22, 2006


Anna Jiang, Ph.D.
Supervisory Patent Examiner
Technology Center 1600